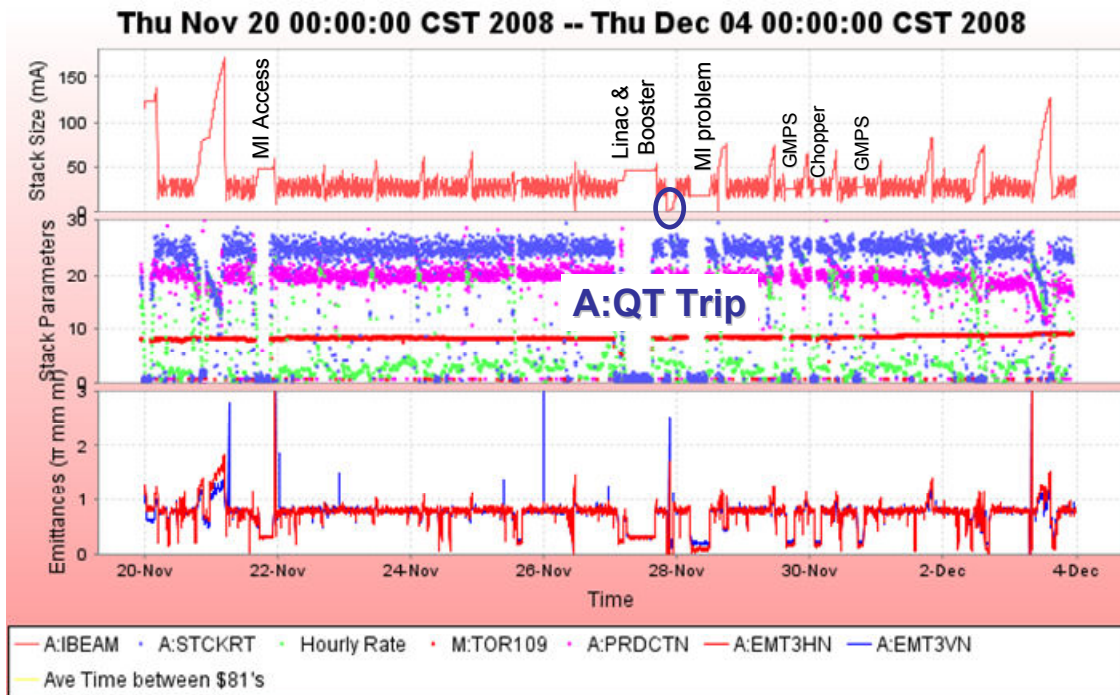


## 2008-12-04 Pbar Department Meeting

Thursday, December 04, 2008  
10:00 AM



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- A:QT trip
- Running  $8.4 \times 10^{12}$  on target at 2.2 second, so most beam power ever. Previously had  $9 \times 10^{12}$  at 2.4seconds.
- Issues
  - D:BPI10D
    - Network Storm after BALROG rebooted.
    - Now Disabled
      - Use Debuncher 53MHz BPM system. D:BPMI## (data logging of first array element)
  - Accumulator Reverse Proton Tune-up TBT
    - Appears that Low intensity caused problems
  - Flux Capacitor Scope Hang-ups
    - On going
    - Still not understood.
    - Budlong has some new code to try...
    - Flux Cap has both the GPIB and VXI11 connections.
  - A:IKIK
    - 50kV
    - No vacuum activity.
    - August 8th we had the adventure....that night 40KV was as high as we could run, so we have made progress since then.
  - Digital Alarm Masks
    - Pbar list is 1/2 the size of last week.
  - D:QF Ground Current
    - Went away...
    - Got to 1.5V
  - Holiday Party – No Bowling!?!?!?!
- Maintenance and Studies
  - Recent
    - Transverse Core Heating and Cooling Rate (Werkema/Lebedev)

- <http://www-bd.fnal.gov/cgi-mach/machlog.pl?nb=pbar08&action=view&page=498&load=>
  - Not much we can do at this moment to make the core transvers cooling better.
  - The amount of gain by adding TWTs may be small, but we'll try anyway.
  - Heating rate 10mm-mrad/hr, 5 minutes damping rate - both fast
  - Putting in TWTs will improve system, but not clear how much.
  - Won't be ready until January.
  - Steps according to Steve:
    - ◆ Put twts in
    - ◆ Check operations
    - ◆ Possibly put equalizers in
  - Steve says can tune local oscillators to a rev harmonic and move across the beam...interrupts stacking for two hours to do both planes...need about 20mA...have to cool beam into the core...
  - Vladimir - check optics....
  - Peterson - check electronics...
- SEM Hardware (Sondgeroth)
  - June Ye - made sigma routine change...
  - Old and new diverge.
  - Standard deviation on new is still larger.
- Cooling system checkout (Pasquinelli/Werkema)
- Proposed
  - Continue cooling system maintenance
  - D/A transfer efficiency
    - Transverse beam size
    - Debuncher tunes
- Spares
  - Target
    - Current/old style
      - New target - beryllium cover not hear until end of January...trying to speed up. Current target should last
    - New version (Beryllium Jacket)
  - Lens
    - 10mm-6 - ready
    - 10mm-7 - fill next week, ready for test stand by end of January.
  - Debuncher RF Tubes
    - 8 new rotator tubes
    - 8 more on order
    - 10 new driver tunes
  - Cooling systems' TWTs
    - 2-4GHz
      - 4 twts
      - 5 delta twts
      - So 9 spares if we don't use deltas.
    - Plus lots of 4-8GHz TWTs.
  - IB7
    - Take pictures
  - PLC Power Supplies
    - 10-2 stub kept getting blasted by temp and/or radiation....we have nice little supplies backfed from upstairs....backfed 10-2 a couple years ago.
    - 10-1 on accopian...but have a more permanat supply. For now if the PLC has to be reset, have to cycle the Acopian PS locally.